



This report offers highlights on a number of Clean Corporate Citizen facilities. For complete information on the Clean Corporate Citizen criteria and application process, please contact:

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#### To The Citizens of Michigan:

I am pleased to present the 2006 edition of "Meet Michigan's Clean Corporate Citizens." The Department of Environmental Quality (DEQ) is excited to showcase 37 establishments who have joined the Clean Corporate Citizen (C3) family and become valued partners in protecting and enhancing our shared environment.

The year 2006 brought with it some exciting C3 milestones. The program added its first local unit of government (Kent County Waste-to-Energy Facility), its first hospital (MetroHealth Hospital - Grand Rapids) and three federal defense installations (110<sup>th</sup> Fighter Wing - Battle Creek, U.S. Army Garrison - Warren, and the Alpena Air National Guard Combat Readiness Training Center). This year also brought an increase of corporations pursuing C3 at multiple locations including: Herman Miller, Hayworth, Consumers Energy, and Detroit Edison.

I would also like to recognize four more C3s for earning their five-year longevity awards (see these C3s on page 1), bringing the total number of long-term participants to twenty eight. It is the continued commitment of these longevity partners that makes the program so successful. By achieving and surpassing goals set forth by the program and constantly looking for new ways to become more efficient, these companies stand out as environmental leaders in their field.

In addition, December 1, 2006, marked an important event in the C3 Program – the passage of the revisions to the C3 Program administrative rules. These revisions added clarity and strengthened the overall criteria necessary to receive and retain C3 designation. The C3 renewals will also now be valid for three years for ISO 14001 certified facilities and two years for non-ISO's. These changes should help reduce the overall administrative overhead for both DEQ staff and C3 applicants alike.

Congratulations to all of our newest Clean Corporate Citizens. I am excited to see you meet your environmental goals as you continue to do business here in Michigan.

Steven E. Chester, Director

### Why We Joined...



"We are very proud to have sustained continuous environmental excellence."

- Multi-Color Corporation



"I am very proud of everyone's efforts which have led us to be recertified. This is a program where it is very easy to see that everyone on site has contributed to our success."

- DTE Fermi 2



"Clean Corporate Citizen has been a very useful tool in our business circle. I hope others have found it to be that way as well."

- Kaiser Optical Systems

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### 2006

# Clean Corporate Citizen Longevity Award Winners

All of the Clean Corporate Citizen Longevity Award winners listed below have been active partners in the program since the year 2001.

Grayling Generating Station, Grayling



Ford Motor Company-Engine Manufacturing Development Operations, Allen Park





Dearborn Mid-West Conveyor, Taylor



Unified Industries, Howell



# Michigan's Clean Corporate Citizen Longevity Award Winners

Automotive Components Holdings, LLC - Chesterfield Plant, Chesterfield

Automotive Components Holdings, LLC - Sheldon Road Plant, Plymouth

Baker, Knapp & Tubbs, Inc., Grand Rapids

Consumers Energy - J.R. Whiting Plant, Monroe

Consumers Energy - Parnall Road Office Complex, Jackson

DaimlerChrysler Sterling Heights Assembly Plant, Sterling Heights

Demmer Corporation - Delta Plant, Lansing

DENSO Manufacturing Michigan, Inc., Battle Creek

Detroit Edison - Fermi 2 Power Plant, Newport

DeWitt Barrels, Marne

DuPont Mt. Clemens Plant, Mt. Clemens

Ford Motor Company - Automatic Transmission New Product Center, Livonia

Ford Motor Company - Romeo Engine Plant, Romeo

Ford Motor Company - Van Dyke Plant, Sterling Heights

General Motors Powertrain - Warren Transmission Plant, Warren

Great Lakes Gas Transmission Company, Eleven Facilities Statewide

Knoll, Inc. - Grand Rapids Manufacturing Facility, Grand Rapids

March Coatings, Inc. - Plant 1, Brighton

March Coatings, Inc. - Plant 2, Brighton

Mark IV Automotive - Big Rapids Plant, Big Rapids

Multi-Color Corporation, Inc., Norway

Smurfit-Stone Container Corporation - Ontonagon Mill, Ontonagon

TAC Manufacturing, Inc., Jackson

T.E.S. Filer City Station, Filer City

# Michigan's Clean Corporate Citizens



3 or more C3's in the area

- 2 C3's in the area
- 1 C3 in the area

#### Michigan's Newest Clean Corporate Citizens

Combat Readiness Training Center (CRTC), Alpena

Consumers Energy - B.C. Cobb Electric Generating Plant, Muskegon

Consumers Energy - J.H. Campbell Complex, West Olive

Consumers Energy - Karn/Weadock Generating Complex, Essexville

Continental Teves, Inc., Auburn Hills

Detroit Diesel/DaimlerChrysler - Redford Component

Manufacturing Center, Detroit

Detroit Edison - Belle River Power Plant, East China Township

Detroit Edison - Harbor Beach Power Plant, Harbor Beach

Dow Corning Corporation - Midland Site, Midland

DURA Automotive Systems, Inc., Mancelona

Eagle Manufacturing Corporation, Shelby Township

Flexible Products Company, Auburn Hills

General Motors - Flint Metal Center, Flint

General Motors - Pontiac Assembly Center, Pontiac

Haworth, Inc.

- Allegan Seating, Allegan
- Douglas Operations, Douglas
- Ludington Components, Ludington

Herman Miller, Inc.

- 171st Avenue Operations, Spring Lake
- Greenhouse Seating Operations, Holland
- Hickory Operations, Spring Lake
- Main Site, Zeeland
- Mid-West Distribution Center, Holland
- Van Wagoner Operations, Spring Lake

Kent County Waste-to-Energy (WTE), Grand Rapids

Machine Tool & Gear, Corunna

MACSTEEL Monroe Inc., Monroe

MAC Valves, Inc., Wixom

MAGNA DONNELLY - Holland Windows Division, Holland

Metro Health Hospital, Grand Rapids

NSK Corporation, Ann Arbor

Nyloncraft, Inc., Jonesville Facility

Plastech Engineered Products, Inc., - Croswell Facility

Plastech Engineered Products, Inc., - Port Huron Facility

Pratt & Whitney Autoair, Inc., Lansing

Recycling Concepts of West Michigan Inc., Grand Rapids

Spartan Steel Coating, Monroe

Subaru Research and Development, Inc. (SRD), Ann Arbor

United States Army Garrison - Michigan, Warren

Ventura Manufacturing, Zeeland

Weyerhaeuser Company - Grayling OSB, Grayling

110th Fighter Wing - Battle Creek Air National Guard, Battle Creek

#### Michigan's Continuing Clean Corporate Citizens

ADAC Plastics - 36th Street Plant, Grand Rapids

ADAC Plastics - Saranac Plant, Saranac

ADAC Plastics - 32nd Street Plant, Grand Rapids

ADAC Plastics - Keating Avenue Plant, Muskegon

ADAC Plastics - Port City Plant, Muskegon

Akzo Nobel Coatings, Inc., Pontiac

Aleris International - Saginaw Facility, Saginaw

American Axle & Manufacturing - Detroit Gear & Axle Plant, Detroit

#### Michigan's Continuing Clean Corporate Citizens

ARVCO Container Corporation, Kalamazoo

Asahi Kasei North America, Inc., Fowlerville

Atlas Technologies, Inc., Fenton

Automatic Spring Products Corporation, Grand Haven

Automotive Components Holdings, LLC - Sheldon Road Plant, Plymouth

Automotive Components Holdings, LLC - Ypsilanti Plant, Ypsilanti

Cadillac Products Automotive Company, Rogers City

Cascade Engineering Automotive Solutions Group, Grand Rapids

Cascade Engineering Industrial Solutions Group, Grand Rapids

Consumers Energy - J.R. Whiting Plant, Erie

Consumers Energy - Parnall Road Office Complex, Jackson

Cyltec, L.L.C., Tecumseh

DaimlerChrysler Sterling Heights Assembly Plant, Sterling Heights

Dapco Industries, Dexter

Dearborn Mid-West Conveyor, Taylor

Demmer Corporation - Delta Plant, Lansing

DENSO Manufacturing Michigan, Inc., Battle Creek

Detroit Edison - Fermi 2 Power Plant, Newport

Detroit Edison - St. Clair Power Plant, St. Clair

DeWitt Barrels, Inc., Marne

Diversified Manufacturing, Howell

Eaton Corporation - Saginaw Plant, Saginaw

Elm Plating Company, Jackson

Ford Motor Company - Automatic Transmission New

Product Center, Livonia

Ford Motor Company - Engine Manufacturing

Development Operations, Allen Park

Ford Motor Company - Livonia Transmission Plant, Livonia

Ford Motor Company - Romeo Engine Plant, Romeo

Ford Motor Company - Van Dyke Plant, Sterling Heights

General Motors - Delta Township Site, Lansing

General Motors - Orion Assembly Center, Lake Orion

General Motors Powertrain - Livonia Engine Plant, Livonia

General Motors Powertrain - Romulus Engine Plant, Romulus

General Motors Powertrain - Warren Transmission Plant, Warren

Grayling Generating Station, Grayling

Great Lakes Gas Transmission Company

(11 Locations Statewide)

Boyne Falls, Brevort, Crystal Falls, Frederic, Lake,

Naubinway, Otisville, Rapid River, St. Clair,

Sault Ste. Marie, Wakefield

I & W Industries, L.L.C., Traverse City

Inalfa/SSI Roof Systems, L.L.C., Warren

Kaiser Optical Systems, Inc., Ann Arbor

Kay Automotive Graphics, Lake Orion

Keykert USA, Inc. - Webberville Plant, Webberville

Keykert USA, Inc. - Wixom Plant, Wixom

Knoll, Inc. - Grand Rapids Facility, Grand Rapids

Lear Corporation - Corporate Campus, Southfield

Light Corporation, Grand Haven

Mark IV Automotive - Big Rapids Plant, Big Rapids

Modern Plastics Corporation, Benton Harbor

Multi-Color Corporation, Norway

Nicholas Plastics, Inc., Allendale

Oetiker, Inc., Marlette

Palmer Engineering, Inc., Lansing

Phoinix Enterprises Inc. & Tribal Precision Performance, Traverse City

Plastech Engineered Products, Inc. - Clarkston Facility, Clarkston

Quality Metalcraft, Inc., Livonia

Skilled Manufacturing, Inc., Traverse City

Smurfit-Stone Container Corporation - Ontonagon Mill, Ontonagon

TAC Manufacturing, Inc., Jackson

Tenneco Automotive, Litchfield

T.E.S. Filer City Station, Filer City

TRW Automotive, Fowlerville

Unified Industries, Inc., Howell



### An Innovative Concept

### Environmental Benefits for Commitment and Achievement

The Clean Corporate Citizen (C3) Program is built on the concept that Michigan establishments that consistently demonstrate environmental stewardship and pollution prevention can be relied upon to carry out their environmental protection responsibilities with less department oversight. These establishments have earned the benefit of greater regulatory flexibility and public recognition for their efforts.

#### A Clean Corporate Citizen Demonstrates:

#### Responsible Environmental Management

A C3 must have a strong and effective Environmental Management System (EMS) in place, based on the nature and scale of their operations. Establishments certified to ISO 14001: 2004, the international standard for environmental management systems, also meet the EMS criteria for C3 designation. Some of the required EMS elements include (see the Appendix for more information on EMS):

- Comprehensive identification of operations, activities, and processes that may potentially affect (negative or positive) the environment;
- Self-initiated environmental and system audits;
- Procedures for emergency response and follow-up, including a system to identify, correct, and avoid future incidents;
- A system for communicating environmental information to both employees and the public;
- An environmental policy that clearly states an establishment's commitment to environmental excellence and continual improvement;
- Environmental training for employees, and
- A system to ensure legal requirements are met.

#### **Pollution Prevention**

A C3 meets the criteria by:

- ♦ Adopting a pollution prevention (P2) policy and having an active establishment-wide P2 program;
- Regularly assessing operations to identify opportunities for waste reduction, reuse of materials, and responsible recycling;
- Setting P2 goals and working toward achievement of those goals;
- Sharing accomplishments and strategies; and
- Participating in information and technical exchange programs to share P2 success stories and encourage other establishments to chart P2 directions.

An establishment can also satisfy the P2 criteria by joining and being a member in good standing in one of DEQ's recognized P2 voluntary partnerships.

- ◆ Department of Defense/State of Michigan Pollution Prevention Alliance
- Michigan Agricultural Pollution Prevention Program (if verified)
- Michigan Business Pollution Prevention Partnership
- Michigan Great Printers Project
- Michigan Pulp, Paper, and Products Pollution Prevention Program
- Michigan Turfgrass Environmental Stewardship Program (if certified)

#### **Environmental Compliance**

A C3 demonstrates consistent compliance with applicable local, state and federal environmental requirements, and has no outstanding unresolved violations. A complete list of permits, licenses, and binding agreements is required at the time of application. The designation is valid for a three year period for ISO certified facilities, and a two year period for non-ISO's, with annual reports required on EMS and pollution prevention activities as well as a self certification of environmental compliance.



#### A Closer Look at Several Clean Corporate Citizens

Welcome to the section of this report that holds the most important information of all: details about Michigan's Newest Clean Corporate Citizens, including information about their specific operations, policies, and achievements.

#### Some Key Terms:

C3: Clean Corporate Citizen

Environmental Management System (EMS): the part of an overall management system that addresses environmental concerns through the allocation of resources, assignment of responsibilities, and ongoing evaluation of practices, procedures, and processes to achieve sound environmental performance. (See Appendix for more information on EMS.)

ISO 14001:2004 a standard adopted by the international organization for standardization to prescribe uniform requirements for the purpose of certification or registration of an environmental management system.

**Pollution Prevention** (P2): eliminating or minimizing the initial generation of waste at the source or utilizing environmentally sound on-site and off-site reuse or recycling. Waste treatment, release, or disposal is not considered pollution prevention in the C3 Program.



# CLEAN CORPORATE CITIZEN PROGRAM

# COMBAT READINESS TRAINING CENTER (CRTC) - Alpena

"We are committed to conducting our mission in an environmentally responsible manner; protecting human health, natural resources, and the environment. It's part of being good stewards of our natural resources, and being good neighbors in our community. This is one more area in which we strive for continual improvement."

Colonel Ewin Sansom, CRTC Commander

The CRTC has continued to demonstrate its commitment to environmental stewardship by expanding its recycling program and employee participation. In all, recycling has increased over 10 percent from 2005 and nearly 700 percent since 2001, including the following major accomplishments:

- Coordination with local document destruction company to collect all cardboard and office waste for base personnel and units in training at no cost.
  - Over 12 tons of cardboard diverted from landfill.
  - Information security improvement for all base users since material is shredded and pulped.
- Centralized recycling center opened to all base personnel.
- Instituted bi-annual base recycling days with volunteer material pick-up which has removed over 12,000 pounds of metal and refrigerants from the community waste stream, in addition to paper, plastic, and cardboard.
- Expanded recycling program to accept plastic water bottles.
- Invested in Gel-Cell battery refurbishers to restored depleted batteries.
- ♦ Annual collection 5,000 pounds of heavy metals from the small arms firing range.
- Recycling anti-freeze to eliminates hundreds of gallons of waste, while reducing the time and cost of procuring new material.
- Over 62,000 pounds of recycled shipping containers used to create realistic training environments for air and ground forces.

These initiatives are an ongoing demonstration of the efforts of the CRTC members to continually evaluate and improve their processes while simultaneously improving their work environment.

#### Vital Statistics

Clean Corporate Citizen since March 8, 2006

Operation:
U.S. Department of Defense Air
Combat Readiness Training
Center

Address:

5884 A-Street Alpena, Michigan 48707

Alpena County



# CONSUMERS ENERGY - B.C. Cobb Electric Generating Plant

"All four of Consumers Energy's baseload power plant sites have made achieving Clean Corporate Citizen status a priority. Overall, industry recognizes the reality that reduced waste and environmental protection are integral parts of operational efficiency and performance excellence."

Jim Coddington, Consumers Energy's vice president of Generation Operations

The B.C. Cobb Plant is located on the eastern shore of Muskegon Lake and has been a long-time contributor to Michigan's rise to industrial prominence. Dating back to the 1940s, the Cobb Plant has two 160-megawatt coal-fired electric generating units and three 60-megawatt natural gas-fired units. Combined, the plant has the capability of generating enough electricity to support a community of 300,000 people. The plant's 130 employees help support the Pollution Prevention Partnership activities of the site and each has contributed to the management of waste reduction programs. The following are just a few of the categories for totals of recycled products and waste from 2002 to 2006:

Oil 39,853 Gallons
Batteries 3,589 Pounds
Lamps (light bulbs) 4,111 Pounds
Antifreeze 120 Gallons

Located at the mouth of the Muskegon River as it broadens into Muskegon Lake, the site includes 300 acres of fields, ponds, and woods. The Cobb site is certified by the Wildlife Habitat Council and a key feature is its transmission right-of-way, which hosts a wide variety of aquatic and terrestrial habitat adjacent to the Muskegon State Game Area.

Vital Statistics

Clean Corporate Citizen since November 1, 2006

Operation:
Power generating facility

#### Address:

151 North Causway Muskegon, Michigan 49445

Muskegon County



#### CONSUMERS ENERGY - B.C. Cobb Electric Generating Plant, continued





A juvenile peregrine falcon at the Cobb Plant following completion of placing leg identification bands as part of a cooperative program with the Michigan Department of Natural Resources

# CONSUMERS ENERGY - J.H. Campbell Complex

"The strategic plan for Consumers Energy plant operations makes recycling an integral part of our future revenue generation. Clean Corporate Citizen status will serve as a tool to help us find creative ways to further minimize our environmental impact and steer us toward new practices that will enhance our competitive edge."

Jack Hanson, Vice President of Generation Engineering and Services

The Campbell Complex is comprised of three power plants that generate enough electricity to support a community of 1 million people. While Campbell Unit 1 has burned 100 percent western coal since 2000 to enhance Consumers Energy's sulfur reduction performance, Unit 3 will complete its conversion to 100 percent western coal in 2007 as part of a \$400 million environmental upgrade of the plant.

The plant's 304 employees help support the Pollution Prevention Partnership activities of the site and each has contributed to the management of waste reduction programs.

The following are just a few of the categories for totals of recycled products and waste from 2002 to 2006:

Oil 76,167 Gallons
 Batteries 5,120 Pounds
 Lamps (light bulbs) 15,045 Pounds
 Antifreeze 2,573 Gallons

The Campbell Complex is certified by the Wildlife Habitat Council and has environmental enhancement programs or projects on 1,600 acres of the site's 2,000 acres. A key feature is the site's Biological Field Station, which hosts many school groups and activities designed to develop an appreciation for environmental stewardship and aquatic and terrestrial habitat studies.

Vital Statistics

Clean Corporate Citizen since February 17, 2006

Operation:
Power generating facility

Address:

17000 Croswell Street West Olive, Michigan 49460

Ottawa County



# CONSUMERS ENERGY - Karn/Weadock Generating Complex

"We are looking for ways to continuously improve Karn/Weadock's environmental performance. Examples of this are our current approximately \$35 million improvement initiative to dispose of all our fly ash in a dry state to help improve surface and ground waters in the Saginaw Bay area. We have also begun testing technology to measure mercury to meet the next environmental challenges. Karn/Weadock is proud to become Bay County's first business to earn the Clean Corporate Citizen designation."

#### Consumers Energy Site Business Manager, Rich Ford

The Karn/Weadock Generating Complex is Consumers Energy's largest power production site and consists of three separate plants: The 310-megawatt coal-fueled Weadock plant; the 515-megawatt coal-fueled Karn 1&2 plant; and the 1,276-megawatt natural gas- and oil-fueled Karn 3&4 plant. Together, the six Karn/Weadock units can generate up to 2,101 megawatts, enough to meet the electric needs of more than 1.3 million people. Karn/Weadock is the first business in Bay County to earn the Clean Corporate Citizen designation. It is located on a 1,000-acre site at the mouth of the Saginaw River along the Saginaw Bay shoreline in Bay County's Hampton Township.

Consumers Energy has installed equipment to reduce nitrogen oxide (NOx) emissions at Karn. This includes a recent \$120 million selective catalytic reduction project that sharply reduced emissions of nitrogen oxides (NOx) by 84 percent. In addition, it has made adjustments to convert to burn western coal, which contains less sulfur than eastern coal. Low NOx burners have also been installed at Karn units 2, 3 and 4. Electrostatic precipitators have also been installed on each coal-fueled generating unit to minimize emissions of

particulates.

Karn/Weadock employees have established several programs affiliated with the Wildlife Habitat Council that have enhanced local habitat and preserved nature: for 12 years employees raised over 260,000 walleye fingerlings in a walleye rearing pond on the Complex's 1,000 acre site. This was done in cooperation with the Michigan Department of Natural Resources and employees volunteered their time after work. Karn/Weadock has an on-site flight pen in which a local partner, Ms. Sandy Miner, rehabilitates injured birds so she can release them back to the wild. From 1995 to the present, 314 raptors have been rehabilitated in the flight pen and returned to the wild, including American bald eagles, great horned owls, snow owls and several varieties of hawks.

#### Vital Statistics

Clean Corporate Citizen since August 30, 2006

<u>Operation:</u>
Power generating facility

#### Address:

2742 N. Weadock Highway Essexville, Michigan 48732

Bay County



#### **CONSUMERS ENERGY - Karn/Weadock Generating Complex, continued**

For many years, employees at the Karn/Weadock Generating Complex have worked to protect and preserve the environment including wildlife near the plant. A 60-acre wetland prairie area on the Karn/Weadock site has been designated as an ecological area to prevent any disturbance. Any planned projects are reviewed to assure there will be no impact to the area. About 140 bird species live on or visit the site, including egrets, great blue herons, snowy owls, swallows, and purple martins. Plans call for a peregrine falcon nesting box to be installed this spring. Deer, fox, rabbits, woodchucks, beavers, muskrats and snapping turtles can also be found on the Karn/Weadock site.

A butterfly garden was established near the entrance to the Karn/Weadock site. The butterfly garden includes indigenous shrubs and plants including a spruce tree, variegated red twig dogwood, chocolate Joe Pye weed, shadblow, low growing sumac, potentilla, butterfly bushes, a water basin and three wood butterfly houses. The butterfly garden is a high-visibility project that introduces visitors and members of the community to Karn/Weadock's wildlife habitat enhancement activities on site.



- ♦ Karn/Weadock has received recognition from the Wildlife Habitat Council recertifying it as a wildlife habitat.
- \* Karn/Weadock has been recognized as a Michigan Business Pollution Prevention Partner for proactive waste reduction activities:
  - Recycling and reusing lubricants.
  - Recycling spent fluorescent light bulbs.
  - Recycling a substantial amount of paper waste generated.
  - Reducing paper waste by utilizing e-mail and other electronic tools.
  - Recycling our ash waste by adding it to concrete products.
  - And reducing the land we need for disposal of our ash by marketing as much of it as we can to the concrete industry.
- Karn/Weadock has switched to more environmentally friendly parts cleaning solvents; recycled 1,000 pounds of batteries and 18,550 gallons of used oil; at least 350 printer and toner cartridges, recycled 300 aerosol cans, 400 tons of scrap metal and at least one drum of discarded circuit boards.

# DETROIT DIESEL/DAIMLERCHRYSLER – Redford Component Manufacturing Center

"As good corporate citizens and concerned neighbors in our community, the Redford Components Manufacturing Center continually strives to identify opportunities to reduce the environmental impact of our operations. We are extremely proud to be recognized as a member of the Clean Corporate Citizen Program."

Chris Snodgrass, Plant Manager, Redford Components Manufacturing Center

#### ONE TEAM DRIVING EXCELLENCE!

The Redford Components Manufacturing Center is a unique manufacturing mall concept that supports the design, testing, and manufacturing of heavy and medium duty engines, truck axles and gear sets and diesel particulate emission filtration components. By partnering together, Detroit Diesel, Axle Alliance, Purem and MTU-Detroit Diesel have maximized the use of this 3.1 million square foot facility, while leveraging the environmental benefits of reusing existing space and the financial advantages of sharing the fixed overhead costs. Through this partnership, all manufacturing tenants in the facility are collectively certified under the ISO 14001:2004 standard and are Michigan Clean Corporate Citizen's and members of the Michigan Business Pollution Prevention Partnership organization.

The Redford Components Manufacturing Center's environmental management system (EMS) is fully committed to continual improvement in environmental management and prevention of pollution in all activities. This commitment makes communicating environmental policies to employees, contractors, visitors and the public a top priority. In addition, the establishment of a comprehensive contractor management program promotes accountability and compliance to the environmental practices and policies.

Vital Statistics

Clean Corporate Citizen since August 9, 2006

> <u>Operation:</u> Automotive Supply

> > Address:

13400 Outer Drive West Detroit, Michigan 48732

Wayne County



#### **DETROIT** DIESEL/DAIMLERCHRYSLER – Redford Component Manufacturing Center, continued

#### We are ONE TEAM committed to:

Targets and objectives to reduce waste Environmental goals to prevent pollution Achieving continual improvement and Meeting environmental regulations

#### Our 2007 GOALS are to:

Enhance our environmental compliance and employee training Reduce risk through system improvements Prevent pollution and continue with waste minimization practices Institute an Energy Management Program Benchmark our processes











#### **Before Renovations**



#### **After Renovations**



#### 2006 Accomplishments

#### 1. Renovated 40 percent of the facility in 2006

Raised 115,000 square feet of the roof, largest continuous roof lift to date 50 percent of the facilities parking lots were resurfaced 575,000 square feet of roofing was replaced

#### 2. Installed 6 new production lines

Heavy duty engine machining Medium duty engine assembly Particulate filter manufacturing process Gear set machining and assembly Front axle assembly 2 new engine coating lines

#### 3. Greatly reduced facility risk by removing

25 percent of identified asbestos containing material 27 PCB and PCB contaminated transformers 2 and reclassifying 3, underground storage tanks in the facility

#### 4. While production increased 11 percent in 2006 we reduced

Hazardous waste generation by 28 percent Process wastewater generation 14 percent Natural gas consumption 7.5 percent City water consumption 6 percent Coolant usage by 29 percent

# DETROIT EDISON - Belle River Power Plant

"Earning the Clean Corporate Citizen designation required a commitment for every plant employee. Of course, there was never any question about that commitment. Teamwork and a genuine concern for protecting the environment are deeply held values among our employees."

Dennis Miller, Plant Manager

Detroit Edison's Belle River Power Plant (BRPP) is located on 2,200 acres northeast of Detroit in St. Clair County. The Belle River plant has the capacity to generate 1,282 megawatts of electricity.

The plant burns clean low-sulfur Western coal from Wyoming and Montana. Covered conveyors, and the use of dust suppression chemicals and bag filters at coal transfer points help prevent dust from entering the atmosphere. Large electrostatic precipitators remove fly ash from the exhaust stacks. Belle River Power Plant management and employees are involved in a broad array of community activities, including a partnership program with the Marysville Public Schools, United Way of St. Clair County, and the American Red Cross.

#### Vital Statistics

Clean Corporate Citizen since July 19, 2006

Operation:
Power generating facility

#### Address:

4505 King Road
East China Twp., Michigan
48054

St. Clair County

#### Wildlife Habitat:

Certified as a corporate wildlife habitat by the Wildlife Habitat Council since 1996 - Belle River Power Plant helped initiate the St. Clair River Waterways of Wildlife Project. By naturalizing plant property and installing nest boxes for bluebirds, mallards and wood ducks, the BRPP is now home to many species of plants and animals.

#### ISO 14001:2004

Certified to the ISO 14001 standard for environmental management systems since 2002 - Belle River Power Plant has a vibrant operational system that drives continual environmental improvement, compliance with regulations and environmental commitments and pollution prevention.

#### **DETROIT** EDISON - Belle River Power Plant, continued

Pollution prevention goals in 2006 included an effort to reduce stack opacity and the continued recycling of flyash (a by-product of combustion), paper and cardboard. Goals in 2007 include monthly tracking of internal energy use and a reduction in hazardous waste generator status. In 2006 Belle River sent 88,520 tons (about 46 percent) of fly ash to cement companies, providing a beneficial use for the by-product and significantly reducing the amount sent to landfills.

#### Clean Corporate Citizen:

Patricia Poppe, Director, St. Clair and Belle River power plants, said that the C3 designation symbolizes the company's deep concern for protecting the environment. "The plant employees – and all DTE Energy employees – are keenly aware that they have a personal responsibility for protecting the environment day in and day out," she said. "This is a commitment we have made to our families, friends and neighbors and to future generations."

The Belle River Plant is the second Detroit Edison plant to receive C3 status this year, along with the Harbor Beach Power Plant in Harbor Beach, Michigan. The company's Fermi 2 Power Plant in Newport and the St. Clair Power Plant in St. Clair have been C3 designated since 2000 and 2003, respectively.



# **DETROIT EDISON - Harbor Beach Power Plant**

"This is a wonderful recognition of the environmental stewardship that is prevalent throughout our power plant. This Harbor Beach Power Plant designation symbolizes the company's deep concern for protecting the environment."

#### Ben Kiehl, Director, North Area Plants

Detroit Edison's Harbor Beach Power Plant (with a generating capacity of 103 megawatts, enough to serve the needs of nearly 45,000 people) is located on beautiful Lake Huron, generates electricity and provides voltage stability to Michigan's Thumb communities. The plant was built in 1968 on 65 acres of land and is one of the community's major employers. The plant received its C3 designation in the spring of 2006.

In addition to earning C3 designation, Harbor Beach Power Plant (HBPP) is one of only a hand full of power plants to become voluntarily certified to the international environmental standard, ISO 14001. They also recently received a Wildlife Habitat certification.

Tim Kerry, production manager for the Harbor Beach plant said, "Achieving Clean Corporate Citizenship certification at Harbor Beach further exemplifies the dedication and commitment of our plants' employees, and a strong corporate support group to our environmental management system. It is the culmination of many years of hard work toward environmental improvements and performance at the plant. We are proud to be recognized."

Detroit Edison installed five piers for public access to fishing and wildlife observation on plant property in 1997. The Harbor Beach Power Plant and the Michigan Steelhead & Salmon Fishermen's Association established net pens so fish could be raised and released at the plant. Approximately 250,000 Chinook salmon were raised at Harbor Beach Power Plant between 1993 and 2002. Harbor Beach Power Plant has worked in cooperation with the Michigan Department of Natural Resources to stock more than 125 thousand brown trout, 20 thousand rainbow trout, and more than 3 million

#### Vital Statistics

Clean Corporate Citizen since May 3, 2006

<u>Operation:</u>
Power generating facility

#### Address:

755 Huron Street Harbor Beach, Michigan 48441

Huron County



#### **DETROIT** EDISON - Harbor Beach Power Plant, continued

chinook (king) salmon from 1993 to present. Harbor Beach Power Plant recently partnered with a local troop of Boy Scouts of America to erect and monitor blue bird boxes on plant property.

Pollution Prevention goals in 2006 included the testing of new western coal to improve the potential reuse of fly ash, innovative marketing of the fly ash and a technical and financial feasibility study on the installation of a slip bag-house to lower air emissions. Current goals include the installation of digital control system for the combustion loop (resulting in air emission reductions), and an investigation of sulfur conditioning improvements to determine if further air emission reductions can be achieved.



Fishing Pier



Boy Scouts Install Birdhouses at HBPP - April 2006

# DOW CORNING CORPORATION - Midland Site

"Our environmental sustainability focus is to reduce the environmental impact and improve the health and safety aspects of our current and future operations, products and services. Achieving the Clean Corporate Citizen status recognizes this effort and is a proud moment for the site."

Ken Kaufman, Midland Site Manager

DOW CORNING

Dow Corning was established in 1943 specifically to explore the potential of silicones. It was created as a joint venture between Corning Glass Works (now Corning, Incorporated) and the Dow Chemical Company.

Today Dow Corning provides performance-enhancing solutions to serve the diverse needs of more than 25,000 customers worldwide. Dow Corning is a global leader in silicon-based technology and innovation, offering more than 7,000 products and services. More than half of Dow Corning's annual sales are outside the United States.



The Midland Site is Dow Corning's original manufacturing site. Also established in 1943, the site employs over 900 people and contributes \$88 million in salaries, wages and benefits to the local economy. Over the past ten years, emissions to the environment have been cut in half while production continues to increase. In 2004 the site set a new record, recovering 8 million pounds of acid for reuse on site. Another process was modified to recover a key raw material; reducing hazardous waste shipments from the process by 50 percent. We also installed equipment to capture ammonia for sale as a byproduct.

In 2005 the Midland Site invested millions of dollars in air pollution control. The objective was to reduce emission of hazardous air pollutants another 50 percent by year end 2006.

Vital Statistics

Clean Corporate Citizen since January 12, 2004

<u>Operation:</u> Chemical manufacturer

Address:

3901 S. Saginaw Road Midland, Michigan 48640

Midland County



## **DURA AUTOMOTIVE SYSTEMS, INC.**

"It is satisfying to see the deligent efforts of our team recognized by the Governor in this manner."

Drew May, Plant Manager

DURA Automotive Systems (DURA) designs, tests, and manufactures hood latches and parking brakes for the automotive industry. The 170,000 square foot facility employs over 500 associates and serves as the division headquarters for the Engineered Assemblies Group. DURA is a supplier to Ford Motor Company, General Motors Corporation, Daimler-Chrysler, and Toyota.

The facility, located on the outskirts of Mancelona, was the first establishment in Antrim County to earn the Clean Corporate Citizen designation. DURA also earned ISO 14001 certification in January 2003, meeting the voluntary international standard for environmental management systems.

"At DURA in Mancelona, we are committed not only to maintaining our position as a top manufacturer of quality automotive parts, but also to building a work environment that reflects the values of our management and staff," said Drew May, Plant Manager. "For this reason and because we recognize our corporate responsibility to the community, we have been very proactive in implementing an environmental management system."

Environmental goals and improvements at DURA include:

- 100 percent recycling of cardboard and wood.
- Recycling of all batteries, including batteries collected from employees.
- A 25-50 percent reduction in non-contact cooling water used annually.
- Elimination of Styrofoam and aerosol containers.
- Commitment to elimination of hexavalent chrome by 2005.
- Development of an asbestos management plan
- Hosting an Antrim County Household Hazardous Waste Collection, helping the community. responsibly dispose of leftover paint, batteries and gasoline, keeping 1,700 pounds of potentially toxic substances out of landfills.
- Hosting an "Electronic Flea Market" with proceeds donated to improvement projects at Wetzel Lake Park.

Vital Statistics

Clean Corporate Citizen since February 20, 2004

<u>Operation:</u> Automotive Suppliers

Address:

310 Palmer Park Road Mancelona, Michigan 49659

Antrim County



### FLEXIBLE PRODUCTS COMPANY

"We are very pleased to be designated as a Michigan Clean Corporate Citizen. Our Company has a strong commitment to protecting our environment; this recognition just reflects how we manage our day to day operations. As we continue to grow our business, we will continually explore ways to preserve our environment."

Doug L. Reid, President at Flexible Products Company

Established in November 1980, Flexible Products Company moved to its current location in Auburn Hills, in 1987. Flexible Products Company is a supplier of molded and mold bonded rubber parts for underbody or chassis vehicles. Flexible Products Company employs 240 members and the representative union is the United Steel Workers of America.

The facility has set and achieved environmental goals that include:

- Recycling 100 percent of the silicone scrap rubber.
- Installing air filtration systems onto the injection molded pressed to decrease air emissions.
- On-going recycling of cardboard, oil, ferrous and non-ferrous metals.
- Upgrading equipment and installing high bay fluorescent lights to reduce electrical energy consumption.
- Reducing the amount of gas to heat the shop floor by capturing heat from our hydraulic pumps from our injection presses.
- Plans to recycle organic rubber to avoid landfill disposal.

The facility has been certified to ISO 14001 Environmental Management Systems Standard since December 9, 2003 and participates in the DEQ Michigan Business Pollution Prevention Partnership.

#### Vital Statistics

Clean Corporate Citizen since October 6, 2006

<u>Operation:</u> Injection Molded Automotive Componenets

#### Address:

2600 Auburn Ct. Auburn Hills, Michigan 48326

Oakland County



### **GENERAL MOTORS - Flint Metal Center**

"We are proud to have achieved Clean Corporate Citizen status and will continue our commitment to environmentally-sound efforts. It is the right thing to do for our community and our business."

Plant Manager, Max Miller

General Motors' (GM) Flint Metal Center is a leader in the manufacturing of quality metal products supplied to more than 17 GM assembly plants throughout North America. The facility covers 2,034,000 square feet and is situated on 85.6 acres adjacent to US-23/I-75 and I-69. Built in 1954, the plant employs more than 3,000 hourly and salaried personnel.

Flint Metal Center proudly achieved Michigan Clean Corporate Citizen status in April 2006. Among the environmental accomplishments at the Flint Metal Center are:

- ISO 14001:2004 re-certification.
- Thirty six percent reductions in non-recycled waste in 2006 compared to 2005.
- Recycling programs that include such items as wood, paper, scrap metal, plastic, oil, batteries, fluorescent lights, and computer/electronic equipment which resulted in more than 430 tons of recycled waste in 2006.
- Efforts to organize the outside storage "die yard", resulting in 237 pieces of equipment being sold or recycled.
- Participation with local schools in an effort to increase environmental awareness and stewardship science exploration centered around Earth Day celebrations.
- Purchasing and distributing red oak tree seedlings to all plant employees for Earth Day.
- Participating in the Genesee County Household Hazardous Waste Collection Days semi-annually.
- Participating in Project GREEN with a Carman-Ainsworth High School.

Utilizing local businesses such as Goodwill Industries and the Genesee County Association for Retarded Citizens to provide services such as plastic recycling and Earth Day tree seedling preparation.

Vital Statistics

Clean Corporate Citizen since April 14, 2006

> <u>Operation:</u> Automotive

#### Address:

2238 West Bristol Road Flint, Michigan 48553

Genessee County



# **GENERAL MOTORS - Pontiac Assembly Plant**

"As the manager of the Pontiac Assembly Plant, it is my goal to continue to be a responsible corporate neighbor in this great community."

Pontiac Assembly Center Plant Manager, Dennis G. Dougherty

Opened in 1972 as Pontiac Truck and Bus, General Motors Pontiac Assembly Center (PAC) has produced vehicles for General Motors for over 35 years. Currently, the Pontiac Assembly Center manufactures both the Chevrolet Silverado and the GMC Sierra full size pick-up trucks. As an ISO 14001 certified facility since 2001, PAC sets annual environmental goals. Environmental performance goals for 2007 include:

- Reduction of solvent usage.
- Increase in cardboard recycling.
- Reduction of non-recycled waste generated.
- Reduction in paint usage.
- Energy reduction.







#### Vital Statistics

Clean Corporate Citizen since September 21, 2006

<u>Operation:</u> Automotive Assembly

#### Address:

2100 S. Opdyke Pontiac, Michigan 48341

Oakland County

# HAWORTH, INC.

Haworth, Inc. is a leading global manufacturer of office furniture and interior architectural systems, including raised access flooring, movable walls, modular voice and data cabling systems, systems furniture, wood and metal casegoods, files, and seating products. Corporate headquarters are located in Holland, Michigan. Haworth owns and operates nine manufacturing facilities in Michigan. Other North American manufacturing locations include North Carolina, Mississippi, Ontario, Quebec, and Alberta. Haworth also operates manufacturing facilities in multiple locations in Europe and Asia.

Haworth, Inc. has maintained a long-standing commitment to environmental excellence. Haworth's initial environmental policy statement was developed in the mid-1990's. Haworth participated successfully in the EPA 33/50 voluntary toxic chemical reduction program (1988 – 1995), was an EPA Green Lights partner, and is an active participant in the EPA WasteWise and Michigan Business Pollution Prevention Partnerships.

Haworth, Inc. was among the first in the office furniture industry to obtain 3<sup>rd</sup>-party certified registrations to ISO 14001. Haworth's Ludington and Douglas plants were initially registered in 1999. The Haworth Allegan Seating Plant was initially registered in 2000. Haworth currently maintains eight manufacturing site registrations to ISO 14001. The Ludington, Douglas, and Allegan plants were initially designated to the MDEQ Clean Corporate Citizen program in 2004.



#### **ALLEGAN SEATING**

Vital Statistics

Clean Corporate Citizen since May 18, 2004

<u>Operation:</u> Office Furniture/Systems

Address:

640 River Street Allegan, Michigan 49010

Allegan County

#### **HAWORTH INC.**, continued

Haworth's ISO-registered facilities are required to annually examine significant manufacturing and product-related environmental aspects, in order to develop annual environmental performance goals. The Ludington Plant upgraded powder paint application equipment in 2004, and is tracking reductions in scrap powder and over-spray. Despite increased production rates, powder paint usage rates are down more than 5 percent, compared to 2003. Ludington also implemented a phosphate-free washline pretreatment process in 2004.

The **Douglas Plant** installed new powder coating application equipment in 2004. Quarterly tracking data indicates that scrap powder generation rates have declined more than 25 percent, compared to 2003. Douglas also implemented a washline water re-circulation program in 2004, resulting in greater than 50 percent reductions in water usage and wastewater discharge rates, compared to the previous year.

The Allegan Plant completed a conversion to water-based adhesives in 2004. Only minimal amounts of VOC-based seating adhesives are still in use, in support of Haworth's long-standing VOC reduction goals. Since 1999, Haworth's VOC emission rates (Michigan plants total) have declined 74 percent. The Allegan plant also achieved a 50 percent reduction in off-site disposal of spent washline chemicals, and a 50 ton reduction in scrap powder paint disposal. Also in 2004, Haworth's seating environmental management system was extended to our plant in Mississippi (successful ISO 14001 registration in December 2004).

Haworth has operated an on-site materials recycling center at corporate headquarters since 1993, featured in the photos on these pages. Haworth received the MI Recycling Coalition "Recycler of the Year" Award in 1999 and 2004. The Ludington, Douglas, and Allegan plants have collected manufacturing scrap for recycling through the Holland recycle center, for many years. In 2004, the three plants combined to recycle approximately 2000 tons of steel, 30 tons of aluminum, 10 tons of plastics, 6 tons of fabric, 12 tons of office paper, and more than 150 tons of corrugated cardboard.

Haworth extends recycling assistance to our local communities as well. In 2004, Haworth partnered with Holland-area communities on an electronics recycling event, held at Haworth Center. Approximately 200 computers, 200 monitors, 130 cell phones, and countless printers, keypads, and other peripherals were recycled, completely filling a semi trailer. Future electronics recycling events are already being planned.

#### **D**ouglas **O**perations

Vital Statistics

Clean Corporate Citizen since February 24, 2004

Operation:
Office Systems

Address:

200 Blue Star Highway Douglas, Michigan 49406

Allegan County



#### HAWORTH INC., continued

Haworth's environmental management system extends beyond manufacturing to address product environmental aspects as well. Because of concerns for office indoor air quality, it is imperative that Haworth products be low emitting (e.g., for VOC's and formaldehyde). Haworth participates in the Greenguard<sup>TM</sup> certification program to document that Haworth products are low emitting, based upon widely-accepted industry standards. Greenguard<sup>TM</sup> certified products accounted for more than 90 percent of Haworth's North American sales volume in 2004. Certified products include systems components produced in Ludington and Douglas, and four seating product lines produced in Allegan.

Haworth also seeks to maximize the recycled materials content of Haworth products. The recycled content of Haworth's primary seating and systems product lines ranges from 30 percent to nearly 70 percent by weight. Many systems fabric options and a growing number of seating fabric options, are made from 100 percent recycled content fibers.

Haworth continually seeks to improve environmental performance. Current focus areas include efforts to expand the use of rapidly renewable materials, reduce greenhouse gas emission rates, increase the use of renewable energy sources, and use life cycle assessment methods to guide new product design. Haworth is finalizing 2005 revisions to our environmental sustainability policy statement. Haworth is committed to completing our first annual sustainability report, at the end of this year, to account for economic, environmental, and social performance.



#### LUDINGTON COMPONENTS

Vital Statistics

Clean Corporate Citizen since February 24, 2004

Operation:
Office Systems

#### Address:

5170 West Progress Drive Ludington, Michigan 49431

Mason County

### HERMAN MILLER INC.



"The C3 program places the burden of proof on its recipients to show they operate in an environmentally responsible manner. We've used this as an opportunity to put our Environmental Management System under the microscope. The C3 annual renewal requirement provides objective feedback so that our employees remain vigilant in our EMS initiatives." Paul Murray, Director of Environmental Health and Safety at Herman Miller

### Legacy of Environmental Leadership

In the early 1950s, Herman Miller founder D.J. De Pree composed a statement of corporate values that declared Herman Miller "will be a good corporate neighbor by being a good steward of the environment."

Mr. De Pree introduced several corporate practices that today are regarded as environmentally sensible, such as placing windows in all company buildings, including manufacturing sites, to let in natural light. He also specified that 50 percent of any Herman Miller corporate site must be set aside as "green space."

Succeeding generations of our company's leadership and employee-owners have expanded upon D.J. De Pree's legacy. Today, "living with integrity and respecting the environment" remains one of our core values. Our

business decisions are constantly guided by a sense of responsibility to the environment, to the others

who live in it, and to those who will follow.

Our environmental sustainability efforts are focused on three specific areas, starting with a vigorous effort to minimize manufacturing waste. Secondly, we evaluate products from their earliest design stages for their material chemistry, ease of disassembly, and recyclability. Lastly, we constantly assess how the design of our buildings can be more energy-efficient and healthy for employees and visitors.

Our approach to business is based on the belief that sustainability and commercial success are not mutually exclusive ends, but instead should coexist in a mutually beneficial relationship.



Clean Corporate Citizens since September 6, 2006

Vital Statistics

Operation: Furniture Systems and Distribution

Address:

MAIN SITE

855 East Main Avenue Zeeland, Michigan 49464



### **HERMAN MILLER INC., continued**

### Herman Miller's Environmental Policy Statement

Approved by the Herman Miller, Inc., Board of Directors
October 2002

At Herman Miller, respecting the environment is more than good business practice – it is the right thing to do. We believe that continued economic growth and environmental protection are inextricably linked – that the quality of life depends on meeting human needs without destroying the environment on which all life depends.

As business leaders, we are committed to develop sustainable business practices that meet the needs of the present without compromising the welfare of future generations. Sustainability demands that we pay attention to the entire life cycle of our products. We will develop strategies that enable us to move toward sustainability while enhancing the value offered to customers. We will measure and monitor progress toward our environmental goals as a key metric of our business success.

On the journey toward sustainable business practices, through continuous improvement, we will:

- Go beyond compliance with environmental regulations and other requirements.
- Pursue prevention of pollution and elimination of waste of any kind.
- Implement technologies to efficiently use energy resources.
- Design our products, processes, and buildings for the environment.
- Promote environmental knowledge and awareness.

### **Environmental Goals and Performance**

In 2004, we set a new environmental mandate with our "Perfect Vision" program. This initiative established a target date of 2020 to meet the following sustainability goals:

- 100 percent reduction of VOC emissions to air.
- 100 percent reduction of process water consumption.
- 100 percent reduction of hazardous waste.
- 100 percent reduction of solid waste to the landfill.
- 100 percent renewable electrical energy use.
- 100 percent of sales from Design for Environment (DfE) approved products.
- 100 percent of owned and/or leased company buildings target USGBC's LEED Silver certification.

We measure our performance against these targets and regularly report our results to senior management. In 2004, we realized we had reached approximately 55 percent of our 1994 baseline reduction goal. As a result, the Environmental Quality Action Team (EQAT) and our senior management

#### Address:

### 171st Avenue Operations

18558 171" Avenue Spring Lake, Michigan 49456

Ottawa County

### Address:

**HICKORY OPERATIONS** 

17170 Hickory Street Spring Lake, Michigan 49456

### **HERMAN MILLER INC., continued**

set more aggressive measurements to reach an 80 percent reduction in our overall environmental footprint by 2010. We have set an additional goal of generating 50 percent of our sales from products that meet our DfE protocol.

### Site-Specific Results

Each Herman Miller manufacturing and shipping location is certified to ISO 14001, the international standard for environmental management that also establishes facility-specific environmental goals, followed closely by Herman Miller. For example:



Main Site (Zeeland) represents Herman Miller's earliest example of environmentally-friendly buildings and the first facility in Michigan to earn Gold LEED (Leadership in Energy & Environmental Design) certification, with 50 percent of property set aside as green space. The Energy Center provides steam for the Main Site from burnable solid waste including wood scrap from sister facilities. The facility partners with Michigan State University, the DEQ, and Shady Side Farm in Ottawa County to recycle 135,000 pounds of poultry manure waste and manufacturing sawdust into safe and beneficial

mulch. In addition, associates from Main Site work with Madison Middle School to increase student literacy through environmental scientific study focused on water quality issues, wetlands, and invasive species.

The Greenhouse Seating Operation is a 293,000 square foot facility located in Holland Michigan. Sitting on property contiguous with the Herman Miller Midwest Distribution, the Greenhouse consists of 186 acres of overall development space. Native plantings are the vegetation covering the majority of the site, eliminating the need for fertilization, herbicides, and lawn mowing equipment. The vegetation on the site also helps to filter storm water runoff from parking areas.

Facing the southwest, the building is positioned to maximize the use of sunlight. Energy conservation techniques include the use of operable windows and clerestories. All lighting specifications meet or exceed "Green lights" and "Energy Star" guidelines. High efficiency artificial lights are controlled with electronic sensors that dim them when daylight is sufficient.

### Address:

MID-WEST DISTRIBUTION
CENTER

10001 Adams Street Holland, Michigan 49424

Ottawa County

Address:

VAN WAGONER OPERATIONS

17155 Van Wagoner Street Spring Lake, Michigan 49456



### **HERMAN MILLER INC., continued**

The Green house facility's pollution prevention goals tie in with Herman Miller's "2020 Goals." These goals include zero emissions to air, zero solid waste to landfill, zero process water consumption, and zero hazardous waste by the year 2020.

171st Avenue Operations (Spring Lake) recycles 88 percent of solid waste, has reduced water use by 20 percent, uses bio-diesel to fuel switcher trucks and lawn equipment, sends all used coolants and oils to recycling, and has set a goal to divert 100 percent of waste powder from landfill. Its VOC emissions have been reduced from over 100 tons per year to zero through the substitution of powder paint for wet coating.





Hickory Operations (Spring Lake) recycles 91 percent of solid waste, has achieved a 20 percent reduction in water use, and operates a pilot program for converting café waste into compost. The facility uses bio-diesel for switcher trucks and lawn equipment, and innovative training helps associates find and fix energy-draining equipment or situations.

Vital Statistics

Clean Corporate Citizen since December 29, 2004

<u>Operation:</u>
Furniture Manufacturing

Address:

GREENHOUSE SEATING
OPERATIONS

10201 Adams Street Holland, Michigan 49464

Ottawa County

Midwest Distribution Center (Holland) has reduced, by 80 percent, the amount of solid waste sent to landfill, achieved a 50 percent reduction in waste sent to Herman Miller's Energy Center, uses new fuel efficient vehicles, and assesses all contracted carriers to ensure sustainable business practices. The facility uses planted native plants to filter storm water runoff and eliminate fertilizers, herbicides, and lawn mowing.





Van Wagoner Operations (Spring Lake) recycles 98 percent of solid waste with zero going to landfill, already achieving Herman Miller's corporate goal of zero landfill waste by 2020. In addition, they use bio-diesel equipment to reduce air emissions, send out used oil for recycling, and landscape facility grounds with native plantings to minimize fertilizers and mowing.

### **KENT COUNTY WASTE-TO-ENERGY (WTE)**

The Kent County Waste-to-Energy (WTE) facility staff hold a great responsibility to maintain a safe, clean community for all of Kent County's citizens. As the first municipally owned Clean Corporate Citizen, the facility has taken steps to ensure that the environmental quality in and around Kent County is maintained through its operational management of strict environmental guidelines and preventive measures.

The Kent County Waste-to-Energy facility began accepting municipal solid waste for incineration in 1990 and processes up to 625 tons every day. This process, combined with other Kent County environmental programs, has prolonged the life of the county-owned landfill by conserving landfill space and preventing metals, other recyclable materials and hazardous products from entering the waste stream. A by-product of the incineration process is high-pressure steam, which is converted to electricity to first be used onsite. The remainder is sold to Consumers Energy and the county-owned District Heating and Cooling Operation to be used in heating and cooling; snow melt; laundries; humidification; and sterilization, culinary and other process needs.

The Waste-to-Energy facility utilizes best available control technology to achieve compliance with strict state and federal air quality regulations.

### Pollution Prevention achievements since C3 designation:

- Continually collecting household batteries countywide and in-house assists in maintaining air quality standards.
- A tire recovery program diverts and recycles tires from refuse.
- Low mercury content Fluorescent lamps replace standard mercury content bulbs during regular facility maintenance.
- By retrieving ferrous metals during processing, 4,431 tons of the valuable resource were recycled during 2006.
- Total boiler availability was 93.65 percent in 2006 compared to 92.80 percent in 2005. Waste processed increased by 4,751 tons in 2006 to a total of 180,726 tons.

### Vital Statistics

Clean Corporate Citizen since March 29, 2006

<u>Operation:</u> Municipal Government

### Address:

950 Market Street SW Grand Rapids, Michigan 49503

Kent County



### KENT COUNTY WASTE-TO-ENERGY (WTE), continued

- Overall energy use was reduced, resulting in a 39 percent decrease in natural gas consumption amounting to a \$7,500 savings.
- The facility routinely achieves compliance with strict state and federal air quality regulations.

### The Future of Pollution Prevention at the Kent County WTE:

- Potential reductions in onsite water usage in specific areas of the facility will be evaluated in 2007. Recent efforts have already reduced city water usage by more than 41 percent, saving Kent County more than \$12,000.
- Reductions in energy consumption will be pursued through an assessment of electrical usage.
- Recycled materials are continually sought out for use in the facility.
- In addition to recycling used oil within the facility, other recycling and reuse opportunities will be explored.
- Working with a local engineering firm, the alternative stormwater and process water management systems are being evaluated. An action plan will result in improvements to onsite stormwater management.



### **MACHINE TOOL & GEAR**

"We began our environmental programs in 2003. Since then, we have saved a lot of money by reducing our waste streams while continuing to create a good quality product. Use of our Environmental Management System has opened the doors and eyes to many savings from environmental efforts."

Cassandra Friess, Environmental Health and Safety Manager, Machine Tool & Gear



Machine Tool & Gear has been in the small town of Corunna since the 1920's. They are one of Shiawassee County's major employers with 225 associates. Machine Tool & Gear is a supplier to major customers like American Axle Manufacturing, General Motors, and Ford Motor Company. They have been doing precision machining since 1927 and they are one of seven plants owned by the parent company, Newcor.

Excellence in customer satisfaction is a key element of their operating philosophy. Technology - both in products and processes - is an important part of the foundation upon which

they are building a sustainable competitive advantage. Continuous improvement, through Lean Manufacturing, is a requirement for all of Newcor facilities, which ensures the ongoing development of new, fresh ideas and a solid plan for rapid implementation.

Achievements attributed to their environmental programs at the Corunna facility include reducing the use of absorbents and increasing in-plant recycling by 20 percent. In 2004, they experienced a 98 - 100 percent reduction of absorbent material; 100 percent reduction in alkaline battery use, 100 percent reduction in mercury containing light bulbs; 85 percent reduction in land filling of disposable clothing and 81 percent reduction in use of disposable mop heads; and reduction of 7,050 pounds of paper and 834 pounds of magazines. As a valuable community partner, they have recently established recycling stations for employees and community members at the Corunna plant. They also give all of their empty print cartridges to local Boy Scouts for reuse and recycling. Future environmental goals include energy and natural resource use reductions, as well as product substitution to more environmentally friendly products.

### Vital Statistics

Clean Corporate Citizen since March 31, 2004

<u>Operation:</u> Manufacturer of axles, brackets, differential pins, gears and related vehicle parts

### Address:

1021 N. Shiawassee Street Corunna, Michigan 48817

Shiawassee County



# MACSTEEL MONROE INC.

"We thank the Department of Environmental Quality for recognizing MACSTEEL Monroe, Inc. as Michigan's 141<sup>st</sup> Clean Corporate Citizen. We will maintain our designation through the use of Lean Principles, Continuous Improvement, and our dedication to Environmental Stewardship."

Mike Roper, General Manager of Operations

MACSTEEL Monroe Inc. is a scrap-based producer of engineered steel bars and primarily serves the light vehicle and heavy truck markets. The facility also has the capability to perform value added processing of these bar products including surface and sub-surface inspection, straightening, polishing as well as certain forms of heat treating. MACSTEEL Monroe was constructed in 1979 and is located east of I-75 in Monroe. The facility now provides jobs to approximately 410 associates.

MACSTEEL Monroe's ISO 14001 system was developed in 2001 and certified that December. We also joined the Michigan Business Pollution Prevention Partnership in July 2006 and were named Michigan's first steel producing facility to achieve the Clean Corporate Citizen Designation in November 2006.

The facility has set environmental goals including:

- 10 percent reduction in natural gas use.
- 20 percent reduction in waste disposal.
- 30 percent reduction in overall waste generation.
- In addition, MACSTEEL Monroe is targeting further reductions in electricity usage.

Demonstrating a long-term commitment to continued operation in our community, MACSTEEL Monroe participated in an Economic Development Job Training/Job Retention grant through Monroe Community College in 2005. MACSTEEL Monroe also received targeted training to retain and create jobs in the steel industry and provided a 30 percent minimum funding match.

### Vital Statistics

Clean Corporate Citizen since November 8, 2006

<u>Operation:</u> Smelting and Steel Casing

### Address:

3000 East Front Street P.O. Box 1200 Monroe, Michigan 48161

Monroe County



### MAC VALVES, INC. - Wixom

"The MAC Valve team deserves this recognition for environmental performance and commitment to continuous improvement. In particular, they set an excellent example by voluntarily communicating portions of their environmental management system and pollution prevention goals to their community yearly. We consider them a valuable partner in the Clean Corporate Citizen program."

DEQ Director Steven E. Chester

The MAC Valves, Inc. facility in Wixom manufactures air valves and related accessories for a variety of markets, including the automotive and hospital industries. The employee-owned company was founded in 1948. The Wixom plant serves as the corporate headquarters for sister facilities in Dundee, Michigan; Liege, Belgium; Taipei, Taiwan; and Auckland, New Zealand.

Environmental goals and improvements at the Wixom facility include:

- A target of 10 percent annual reductions in coolant usage.
- Cardboard, rubber, and office paper recycling programs that reduce the amount of solid waste sent to landfill.
- Reduced paint usage by 80 gallons over five months, leading to less VOC's (volatile organic chemicals) released to the atmosphere.
- A 5-year project to reduce energy usage 14-18 percent through installation of more efficient T-8 lights and ballasts.
- Recycling programs for aluminum and brass.
- A 4,000 gallon reduction in water usage on the production washer line.
- Efforts to find a safe and effective replacement for naphtha.

MAC Valves, Inc. ensures that all employees participate in the facility's environmental goals by including environmental performance as a factor during annual consideration for individual employees' promotions and raises.

The facility has also voluntarily joined the Department of Environmental Quality as a partner in the Michigan Business Pollution Prevention Partnership.

### Vital Statistics

Clean Corporate Citizen since February 20, 2004

> <u>Operation:</u> Air Control Valves

#### Address:

30569 Beck Road Wixom, Michigan 48393

Oakland County





"The Engineered Glass Division of Magna Donnelly is honored to join the ranks of Clean Corporate Citizens. This achievement is the result of our collective workforce working together to increase our commitment to improving our environment."

Bruce Warren, General Manager

Magna Donnelly's Engineered Glass Division is a major supplier of automotive window systems. Its state-of-the-art glass modules set industry and design standards, and offer new options in sun protection and sealing performance. The company recently introduced the concept of 360° Vision, with a goal of eliminating obstacles in the driver's field of vision and to improve safety.

Magna Donnelly has a rich tradition of community involvement and responsibility. Since its inception, its programs of corporate giving and employee volunteerism have helped communities grow, while its commitment to environmental responsibility has helped maintain a high quality of life.

In order to be a leading corporate citizen in the area of environmental protection, Magna Donnelly seeks to:

- 1. Establish environmental goals and objectives on an annual basis.
- 2. Develop awareness programs and practices that will safeguard and preserve the environment.
- 3. Minimize negative environmental impacts through activities that are designed for the prevention of pollution.
- 4. Surpass minimum compliance requirements of governmental environment regulations and programs and other organizations to which the company subscribes.
- 5. Continually review and improve the environmental performance of our manufacturing facilities in the communities in which we operate.
- 6. Continue to work with business organizations and governmental agencies to influence the development of technically sound and financially responsible environmental regulations.
- 7. Encourage the involvement of employees in order to ensure an environmentally healthy workplace.
- 8. Participate in educating employees and the community in environmental awareness.
- 9. Audit practices and programs in order to ensure continuous improvement.

### Vital Statistics

Clean Corporate Citizen since October, 18, 2004

<u>Operation:</u> Automotive Supplier

#### Address:

3600 John F. Donnelly Drive Holland, Michigan 49424

### MAGNA DONNELLY, continued

In order to provide direction for global environmental stewardship, we recognize the value of environmental leadership, responsibility, and innovation in the management of our facilities and operations.

Magna Donnelly, headquartered in Troy, Michigan, is the world's largest producer of automotive mirror systems. It is also a major supplier of automotive window systems and door handles, and it is leading the way in automotive electronics that provide automotive control, sensing and communications systems to improve vehicle safety and convenience. Magna Donnelly, a subsidiary of Magna International, has over 8,000 employees in 16 countries, including approximately 3,000 employees in Michigan. It supplies products to every major automotive manufacturer in the world. More information on Magna Donnelly is available at <a href="http://www.magnadon.com">http://www.magnadon.com</a>.



### **METRO HEALTH HOSPITAL**

We are exceptionally pleased to be recognized as the first Clean Corporate Citizen among medical facilities in our state. We have long been committed to the principles of sustainability and environmental health, which are demonstrated by this environmental award."

Mike Faas, President and CEO of Metro Health

The Grand Rapids-based acute-care hospital has received the award, which recognizes its commitment to promoting healthy and progressive business practices, during a special ceremony on the lawn of the facility at 1919 Boston Avenue, SE, on Thursday, July 27, 2006. Grand Rapids Mayor George Heartwell, officials from the Michigan Department of Environmental Quality and other community leaders were on hand for the presentation.

Metro Health officials spent more than a year to establish an environmental management system that allowed it to identify and eliminate the use of harmful chemicals, institute campus-wide recycling programs, reduce the amount of medical waste generated and other key initiatives. The hospital made no capital expenditures for any of these programs, which have already generated tremendous savings in time and money.

"I am exceptionally proud of our employees, who developed innovative, environmentally friendly and costeffective solutions to many operational issues that allow Metro Health to operate in a 'greener' fashion. This process will only be accelerated next year, as we prepare to move into one of the first LEED-certified hospital in the nation." Faas said. Vital Statistics

Clean Corporate Citizen since June 14, 2004

> <u>Operation:</u> Health Care

Address:

1919 Boston S.E. Grand Rapids, Michigan 49424

Kent County



John Ebers, sustainable practices coordinator, and Jamie Crouch, safety officer, led Metro's efforts to prepare a comprehensive environmental management system to better manage and improve the hospital's efforts to be more environmentally friendly. Specific initiatives included:

Mercury-free campus: Metro Hospital was one of the first in the state to identify and replace medical equipment that uses mercury, a toxic liquid found routinely in thermometers, thermostats and sphygometers, or blood-pressure cuffs. The Hospital has been recognized with a Making Medicine Mercury-Free Award by the hospitals for a Healthy Environment.

Reduction of hazardous chemicals: The hospital is one of only a few hospitals to eliminate the use of glutaraldehyde, a widely used medical disinfectant that has been shown hazardous to employee health over time. The hospital's Product Review Committee, which reviews and evaluates the total cost of all products used, identified a replacement chemical that accelerates the disinfectant process, reduces the need for special ventilation equipment and is far safer for employees to handle.

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### METRO HEALTH HOSPITAL, continued

Development of campus-wide recycling programs: Metro Hospital also instituted campus-wide recycling programs for paper, electronics and other items that would have ended in the landfill. The hospital hosted its first campus-wide electronics recycling day, which is designed to encourage employees to bring in old computers, televisions, telephones, etc. Specific recycling highlights in the past 18 months include:

Recycling 28 tons of paper .Recycling 80 tons of cardboard.

- Recycling nearly six tons of X-ray film.

- Recycling 2000 pounds of batteries.

- Recycling 2000 pounds of light bulbs.

Reprocessing medical devices: The hospital is actively working to maximize the lifespan of disposable medical devices, such as compression sleeves and pulse oximeter probes, wherever possible. In June 2006, Metro Hospital began purchasing reusable sharps containers, which will eliminate 15,000 pounds of plastics from entering the landfill each year.

"We saw this opportunity as a challenge to ourselves to create a safer and healthier environment for our patients, employees, visitors and the community at large," Ebers explained. "This is especially fitting, given our heritage as an osteopathic teaching hospital and the focus we have on the whole person and his environment." Crouch agreed, noting: "Our efforts are about far more than bottom-line savings, although those are certainly important. These initiatives will make us a cleaner, safer and more efficient organization that is focused on delivering the highest caliber of patient care."

Metro Health Hospital is a 238-bed general acute care osteopathic teaching hospital that serves more than 130,000 patients in Kent and surrounding counties. Metro Health offers a board range of services, including inpatient and outpatient services, emergency, surgery, intensive care, rehabilitation, wellness and community education. For more information, visit metrohealth.net.



# NSK CORPORATION

"NSK is a long-time citizen of the Ann Arbor area and is committed to contributing to our neighborhood in a positive way. NSK is dedicated to conducting operations in a manner which prevents pollution, protects the environment in which we interact, and provides quality outcomes in all aspects of our business."

Julie Lynch, Human Resources Manager

The NSK Corporation is a world-class producer of ball and roller bearings. The Corporation was created from two old and respected names in the bearing industry, Hoover Ball and Bearing and Nippon Seiko Kabushiki Kaisha. The corporate headquarters has been located in Ann Arbor since 1916. They express an intense commitment to environmental protection, engineering research, and an obsession with quality to produce the industry's leading anti-friction bearings. NSK was originally registered to the ISO 14001 standard in 2001 and successfully renewed their registration in March 2005. Innovative engineering methods give them the flexibility



to keep pace with the ever-changing technical needs of customers. As a result, they produce bearings designed to operate at higher speeds, with greater precision and greater durability. NSK has over 80 years experience in design, development and manufacture of nearly every kind of anti-friction bearing. This experience combined with up-to-date research methods and close attention to quality control have made NSK a world-class supplier of bearings to all major industries.

At their Ann Arbor facility, NSK thoroughly researched how their daily operations touch the environment. Waste streams were examined with the goal of reducing waste while maintaining product integrity. Grease waste was identified as a significant environmental aspect of operations at NSK. Reductions in the amount of grease used and aggressive recycling programs have led to

### Vital Statistics

Clean Corporate Citizen since January 30, 2004

<u>Operation:</u> Manufacturer of ball bearings

### Address:

5400 S. State Road Ann Arbor, Michigan 48103

Washtenaw County

### NSK CORPORATION, continued

waste reductions and have contributed to saving the company thousands of dollars annually. Corrugated cardboard usage has been reduced by switching to returnable plastic totes. Solid waste was decreased by 18.5 percent, and water use was reduced by 12,732,800 gallons in 2004. Mop water is currently the largest waste stream in the Ann Arbor plant. NSK has the philosophy that reducing waste materials not only benefits the environment, but preserves natural resources for future generations and saves the company money.



NSK is also a valuable partner with the Washtenaw County Pollution Prevention Program is a Community Partner for Clean Streams, and participates in the Lion's Club eyeglass collction, Strides Against Breast Cancer, and American Red Cross Blood Drives.

Zero pollution is our solution at NSK Corporation



# NYLONCRAFT, INC. - Jonesville Facility

"We are extremely proud to be named the 104th Clean Corporate Citizen. At Nyloncraft we focus on providing quality, cost efficient products on time, while controlling our impact on the environment, preventing pollution and meeting customer and regulatory requirements. We use these goals to direct our daily work practices."

Jeff Sherman, Plant Manager

Nyloncraft, Inc. is ISO 14001 & TS 16949 certified, it is located in northern Hillsdale County and supplies injection molded thermoplastic parts and assemblies to Honda Corporation, General Motors Corporation, Visteon Corporation, DURA Automotive, & DENSO Manufacturing as well as other automotive manufacturers.

Some of the facility's goals for energy reduction include:

- · Oil usage reduced by 10 percent annually.
- Reduction in natural gas usage by utilizing heat generated by the equipment and distributed throughout the plant.
- · Lighting replaced with low mercury fluorescent bulbs.
- · On-going recycling of cardboard, paper, plastics wood and metals.

Nyloncraft is proud to carry its environmental commitment into the community by participating in an annual cleanup of the St. Joseph River and as a member of the Kalamazoo River Basin phosphorus level Reduction Initiative. Partnerships with University of Michigan and Consumers Energy help to identify and implement energy reduction strategies.

Vital Statistics

Clean Corporate Citizen since September 24, 2004

<u>Operation:</u> Thermoplastic products

Address:

1640 U.S. 12 East Jonesville, Michigan 49250

Hillsdale County



# PLASTECH ENGINEERED PRODUCTS, INC. - Croswell Facility

Plastech Croswell is an 81,000 square foot shipping, receiving, and manufacturing facility, established in 1977, located at 100 Seltzer Road, Croswell, MI. We have 39 horizontal and rotary injection molding machines ranging in size from 75 to 1000 tons. Granular plastic resin is melted and injected into molds to form automotive parts which are inspected and assembled as required, then packaged for shipment to customers throughout the world. Main products include fluid containers, precision components, and interior trim parts. Major customers are Ford Motor Company, Visteon Corporation, and Johnson Controls.



Molding operations run three 8-hour shifts (24 hours per day) and assembly operations run two 8-hour shifts, five to six days per week, year round. There are currently 160 employees.

Our Environmental Management System was developed in 2002 and achieved ISO 14001 certification that December. We joined the Michigan Business Pollution Prevention Partnership in May, 2004, and were named Sanilac County's first Clean Corporate Citizen in October, 2004.

To help our people learn environmental terms, and instill recycling as an everyday practice at home and at work, we developed several crossword puzzles and word search/word scramble games for employees, and sent home coloring pages for their children and grandchildren. We sponsored a

contest for employees and provided world-shaped balls for local school classes.

Through training, recycling, and consumption avoidance we reduced solid waste previously disposed of in the landfill by over 50 percent based upon 2002 levels (factored by sales dollars), and maintained the reduction through 2004 in spite of major operational changes.

Objectives for this year include maintaining reduction of solid waste and developing targets for reducing energy consumption, deemed by the cross-functional environmental management team to be our current most significant aspect.

### Vital Statistics

Clean Corporate Citizen since October 9, 2004

Operation:
Automotive Supplier

#### Address:

100 Seltzer Road Crosswell, Michigan 48422

Sanilac County

# PLASTECH ENGINEERED PRODUCTS, INC., - Port Huron Facility

"Plastech Port Huron is very pleased to be the 100th Michigan Clean Corporate Citizen. We are dedicated toward our goals of continuing with the minimizing of our environmental impact to our community. We will continue to improve our manufacturing process to ensure the healthy environment and the safety and well-being of our employees,"

Joyce Evans, Plastech-Port Huron Environmental and Safety Coordinator

The Port Huron plant is a 142,764 square foot shipping, receiving, and manufacturing facility. The molding department contains 57 injection molding machines ranging from 28 tons to 1500 tons. The facility operates year-round on three shifts, 24 hours per day, 5 days per week, with 260 employees. Plastech-Port Huron became ISO 14001 certified in December 2001, and has been a partner in the Michigan Business Pollution Prevention Partnership since April 2003.

Plastech Port Huron achieved their C3 designation by continually incorporating P2 programs into their daily operations. Program goals for 2004 included:

- Reducing amount of aerosols that contain toxic substances by 50 percent: Went from 227 cans down to 20, and are now also using environmentally-friendly aerosols.
- Reduction of hydraulic oil waste by 25 percent: Went from 4,615 gallons of used hydraulic oil in 2003, down to 2,475 gallons in 2004.
- Universal Waste Program recycles batteries and fluorescent lamps: Recycled 210 pounds in 2003 and 270 pounds in 2004, which equaled a 25 percent reduction in waste going to landfill. We have implemented an employee battery recycling program in which we encourage employees to bring in their used household batteries instead of throwing them in the trash.
- Recycling of cardboard and paper: Recycled 9,723 pounds in 2003 and 18,800 pounds in 2004, which equaled a 50 percent reduction in wastes going to landfill.
- Reduced scrap plastic parts going to the landfill by 50 percent.
- Reduced magazine subscriptions by 50 percent.
- Recycled printer cartridges.

Vital Statistics

Clean Corporate Citizen since May 22, 2004

Operation:
Automotive Components

Address:

2133 Petit Street Port Huron, Michigan 48060

St. Clair, County



# PRATT & WHITNEY AUTOAIR, INC.

"We are extremely pleased to be recognized as a new member of the Clean Corporate Citizen program by the Michigan Department of Environmental Quality. Working together over the past two years we have been able to bring about dramatic changes in our Environmental, Health & Safety program, not only improving our daily environmental stewardship, but establishing a culture that will be sustainable for many years to come. We will continue to look for opportunities for improvements in our EH&S program and not be satisfied until we achieve World Class standards."

John Borajkiewicz, General Manager

Pratt & Whitney AutoAir, Inc. is a leading supplier of composite and metal-bonded products to the aerospace industry, with three facilities in Lansing and one in Sunfield. The Lansing facility located on Enterprise Drive operates with 260 employees in four buildings, and has earned the Clean Corporate Citizen designation. Pratt & Whitney AutoAir offers design, manufacture, and repair capability for jet engine test equipment; acoustical, abradable, and containment hardware; and various aircraft components.

Pratt & Whitney AutoAir's Pollution Prevention/Energy and Water Management Committee monitors and directs all waste minimization activities related to the facility. In 2002-2003, all of the facility's waste streams were inventoried to analyze and document current practice, and to improve efficiency of waste handling practices.

The facility's environmental goals include:

- Projects to reduce natural gas, electrical, and water usage.
- Reducing the volume of recycled cardboard through changes that allow incoming parts containers to be re-used for ship-out.
- Developing a comprehensive off-hours shutdown plan to reduce electrical usage, and develop an energy efficient lighting program.
- Reducing the use of methylethylketone by 20 percent.
- Installation of a new degreasing system that eliminated trichloroethylene from the facility.

### Vital Statistics

Clean Corporate Citizen since March 15, 2004

<u>Operation:</u> Aviation Parts Supplier

### Address:

5640 Enterprise Drive Lansing, Michigan 48911

Ingham County

### PRATT & WHITNEY AUTOAIR, INC., continued

Through their pollution prevention programs, the Lansing Pratt & Whitney facility has:

- Reduced hazardous wastes by 4,500 pounds\*, a 20 percent reduction.
- Reduced the volume of waste solvents in paint gun cleaners by 250 pounds.
- Reduced the volume of waste aerosol cans by over 95 percent.
- Reduced air emissions by 4,000 pounds\*, a 36 percent reduction.
- Reduced non-recycled wastes by 425,000 pounds\*, a 54 percent reduction.
- Reduced recycled materials by 93,000 pounds\*, a 60 percent reduction.

The facility is also a member of the DEQ Michigan Business Pollution Prevention Partnership, and a founding member of the Central Michigan Sustainable Business Forum.

\* Compared to 2002.

# RECYCLING CONCEPTS OF WEST MICHIGAN INC.

Recycling Concepts of West Michigan Inc. was started to help solve the waste question that all industrial companies are facing today. How do I recycle 20 different items effectively, efficiently and economically?

We created Recycling Concepts to do just that and currently handle over 100 different types of non-hazardous materials today, from sorted plastics, paper, drums and pallets to fabrics, foams, and other commingled materials. We have been solving environmental problems for other companies for years and we are participating in the pollution prevention and C3 program as a means to measure our environmental aspects and impacts.

We have implemented the following programs internally:

- Office Paper Recycling
- ♦ Propane Reduction
- ◆ Diesel Fuel Reduction
- ◆ Electricity Reduction
- Printer Cartridge Recycling
- ◆ Water Run off Prevention

We are extremely proud of our achievements and will continue to find ways to reduce reuse and recycle for other companies as well as our own.

### Vital Statistics

Clean Corporate Citizen since June 20, 2006

<u>Operation:</u> Industrial Recycling

#### Address:

5015 52nd Street Grand Rapids, Michigan 49512

Kent County



### **SPARTAN STEEL COATING**



"We are extremely pleased to be recoginzed as one of Michicgan's Clean Corporate Citizens. This program, along with our ISO 14000 efforts, supports our longstanding company philosophy toward practicing good citizenship."

Dave Brandau, Operations Manager at Sprta;n Steel Coating

Formed in 1996, Spartan Steel Coating is a joint venture between Worthington Steel and SeverStal NA (formerly Rouge Steel). Our business is applying zinc to steel coils though a process called hot dipped galvanizing. Our hot-dipped galvanizing line currently produces more than 400,000 tons of galvanize and galvanneal steel annually. Approximately 75 percent of our business supplies automotive customers, with the remainder used in construction, appliance, and manufacturing industries. Spartan employs 75 people who work together in a team-based environment.



Our commitment to continual improvement forms the basis of our operations and is supported by our ISO/TS 16949 registered Quality Management System. Our commitment to our community is supported by our ISO 14001 registered Environmental Management System. Coupled with our OHSAS 18001 registered Safety Management System, we've integrated these programs into our Spartan Operating System.

Vital Statistics

Clean Corporate Citizen since December 21, 2004

Operation:
Steel Coatings

Address:

3300 Wolverine Drive Monroe, Michigan 48162

Monroe County

Spartan Steel Coating is also committed to responsible corporate citizenship, which includes properly managing our impact on the environment.

Process waters are continuously filtered and re-circulated where possible. Each year, specific goals are established throughout the organization to reduce the amount of waste generated and to reuse and recycle wherever possible.

This year we have reduced the amount of scrap steel we generate, made structural improvements to the storm water pond, reduced the chemical and oil drum inventory throughout the plant, achieved small quantity waste generator status, and switched from disposable to recyclable absorbents. All of our employees receive extensive training to elevate and enhance their environmental awareness both at the plant and at home.



# SUBARU RESEARCH AND DEVELOPMENT, INC. (SRD)

"SRD is pleased to be the first automobile manufacturer's research and development facility to receive C3 membership. This recognition has been earned through the 100% interest and participation of all employees and a long term commitment for continual environmental improvement by management."

Frank Kurk, General Manatger



We developed this internal company logo for our environmental programs

### Vital Statistics

Clean Corporate Citizen since September 20, 2006

<u>Operation:</u>
Automotive research and
development

#### Address:

3995 Research Park Drive Ann Arbor, Michigan 48108

Washtenaw County

Subaru Research and Development's principal responsibility in Michigan is automotive vehicle emission testing and certification for the EPA. Our ever-increasing chassis dynamometer testing programs include pre-production testing for government certification, which allows us to sell vehicles in the U.S., and the testing of customer vehicles of various model years. These tests are requested by the EPA to ensure that the pollution controls are still meeting government regulations.

Developing an internal environmental program was a natural progression for staff members at SRD, who are already very conscious of automotive emissions. Our program, and others at every Subaru facility in North American, began in April of 2003 at the request of our Japanese parent company Fuji Heavy Industries (FHI). We have annual meetings at which each company gives a presentation of their accomplishments, short term, and mid term goals to FHI. Helpful improvement ideas have been shared and adopted from each other's successes. We are proud of our individual and group successes and urge other business to become more environmentally conscious.

### SUBARU RESEARCH AND DEVELOPMENT, INC., continued

Additionally we have an annual employee meeting that recaps the previous year's accomplishments. Improvement project suggestions are made by our employees, and management reviews these suggestions to select and approve one project from each department and decide on capitol improvement projects for the year.

Using 2002 as a benchmark the SRD team has accomplished the following:

- 52 percent reduction in waste generated.
- 86 percent reduction in landfill.
- 78.6 percent recycle rate.
- 28 percent reduction in electricity usage.
- 20 percent reduction in natural gas usage.
- 51 percent reduction in water usage.
- 93 percent reduction in irrigation.
- 75 percent reduction in copy paper purchases.
- Elimination of styrofoam coffee cups.
- Green purchasing of all office supplies available.





## WEYERHAEUSER COMPANY – Grayling OSB

"Our entire organization; led by our Environmental Committee, is committed to excellence in environmental performance and responsibility. In addition to our Environmental Management System, our wood procurement system is certified to the American Forest and Paper Association's Sustainable Forestry Initiative standard (SFI®). We were among the first in our company and industry to receive this certification, which speaks to the importance we put on keeping our forest habitat healthy and sustainable while providing products that are essential to peoples' lives."

Dave Malm, General Manager

The Weyerhaeuser Structurwood facility of Grayling began operations in 1982 as Weyerhaeuser Corporations first oriented strand board (OSB) mill. OSB is used in the construction of commercial and residential buildings, and in the recreational vehicle and mobile home industry for roofing, walls, and flooring. The mill currently employs 169 people who work in a self-directed team environment. Operating and functional teams manage all aspects of mill operations and processes and have a high level of ownership and business understanding throughout the facility.

Our path to Clean Corporate Citizen designation began in the 1980's when we formed the mill's Environmental Committee. The committee includes a cross-section of team members from all areas and functions of the mill. From it's inception, this group has worked to continually improve our environmental practices and has instituted preventative plans and processes. Employees at the facility are committed to ensuring that we follow Weyerhaeuser's Environmental Policy and minimize our footprint on the environment.

The Grayling mill achieved ISO 14001 EMS certification and Sustainable Forestry Initiative (SFI) certification in 2001. We partnered with the Michigan Pollution Prevention Partnership (MBP3) and the Michigan Pulp & Paper Environmental Council and its Pollution Prevention Program (P5) in 2003.

Vital Statistics

Clean Corporate Citizen since May 18, 2004

Operation:
Wood Products

Address:

4111 West Four Mile Road Grayling, Michigan 49738

Crawford County



### WEYERHAEUSER COMPANY - Grayling OSB, continued

We set and achieved goals in 2004 that include residual and wood waste reductions from specific processes from 10 percent to 70 percent. We improved logger and contractor environmental awareness through training and we developed a Universal Waste and Mercury Reduction Plan.

In 2005 we worked toward reducing water use, implemented our Universal Waste and Mercury Plan, have made additional reductions in landfilled waste wood and paint waste, and improved forestry management. We also be partnered with the communities located in Crawford County for their second annual tire recycling event.

### Our environmental core policy states:

It is Weyerhaeuser's core policy that employees at all levels will work to ensure that we comply with applicable laws, regulations and other requirements to which the company commits, and to continually improve our environmental performance wherever we do business.

Employees are accountable for ensuring compliance with applicable laws and for managing our business to conform with the company's goals of:

- Practice sustainable forestry.
- Reducing pollution.
- Conserving natural resources.

### For the entire text of the policy, please visit www.weyerhaeuser.com

### Recycling programs include:

- used oil
   wood residuals
   scrap metal
   scrap wire
   toner cartridges
   newspaper
   newspaper
- gloves office furniture fluorescent tubes mercury switches electronic equipment

# 110th FIGHTER WING - BATTLE CREEK AIR NATIONAL GUARD

The 110 Fighter Wing is a world class organization dedicated to protecting not only the citizens of the State of Michigan, but the rest of the world. The 110<sup>th</sup> has a long history of deployments in support of America's efforts to promote world peace, including most recently, Operation Iraqi Freedom. Everyday operations at the base include flying and maintenance of the A-10 aircraft, vehicle operations, facility repair and administrative work. Whether working on the flightline or in the office, base personnel strive every day to maintain a safe, environmentally sound workplace.

Pollution prevention efforts have been underway at the base for well over fifteen years and have resulted in an overall pollutant reduction. Several examples include the reduction of hazardous waste generation by over ninety three percent, reduction of hazardous chemicals used both in the quantity and type, the elimination of all underground storage tanks and the elimination of the use of all ozone depleting substances. In addition the base recycles many items including metal, paper, batteries, cardboard, oil, computers, anti-freeze and printer cartridges. Changes in the chemical processes have not come about without a concerted effort by base personnel since in most cases the work involved to revise the process went well beyond the fence line of the base. In order for a new chemical to be introduced it had to be first reviewed and approved by the Air Force process manager and others. But these changes have come, many times in conjunction with better equipment.

The base has been developing over this same fifteen year period into one of the premier Air National Guard bases in the nation. All base facilities have been either replaced or rebuilt taking into account both energy efficiency and health and safety aspects during the design process. With the new facilities came improved equipment that reduced or removed harmful emissions and made it safer for the workers at the same time. Even with all the improvements that have occurred, the 110 Fighter Wing will continue to work toward an even better, more sustainable future.

### Vital Statistics

Clean Corporate Citizen since December 15, 2006

<u>Operation:</u> Air National Guard

### Address:

3545 Mustrang Avenue Battle Creek, Michigan 49015

Calhoun County



### EMS Close-Up

### <u>Appendix</u>

### What is an Environmental Management System (EMS)?

An EMS is a voluntary system for identifying, controlling, and monitoring the regulated and nonregulated activities at a facility that could impact the environment. The EMS concept was developed by industry as a proactive way to:

- ◆ Improve environmental performance beyond that required by regulation;
- Create a more level "playing field" in environmental control in the world market;
- ◆ Provide a competitive advantage; and
- Give credibility to environmental programs.

### What does an EMS look like?

There is not one single type of EMS but there are standards or formats to follow in developing a system. The most well-known and widely used EMS standard in the United States and the world is the International Organization for Standardization (ISO) standard, ISO 14001:2004. The C3 rules on EMS content incorporate this international standard. Some of the elements of an EMS are:

- Operational control through work instructions and procedures;
- Employee environmental training;
- Emergency response planning; and
- Environmental recordkeeping and reporting.

Most likely, a facility already has programs and documents that satisfy most of the common elements. The facility might only need to formalize its procedures and documents so the programs can be managed in a logical and accessible manner.

### What are the benefits of an EMS?

A facility can reap numerous business benefits from EMS development in addition to those provided by C3 designation. These benefits include:

- Reduced costs Facilities that have implemented an EMS report improved operating efficiency through the focus on important issues, the development of standard procedures, and increased employee training.
- Competitive advantage Consumers and manufacturers are giving preference to products from environmentally responsible suppliers.
- Improved image The local community, environmental regulators, and environmental groups see EMS development as an indication of a facility's willingness to be a responsible citizen and to go beyond compliance. They will be willing to recognize and reward those efforts.
- Enhanced regulatory compliance The adoption of procedures and work instructions and the additional related training will add consistency and stability to the environmental programs and reduce a facility's potential for liability.
- Improved environmental performance The systematic identification of potential environmental impacts and the on-going setting and achievement of goals to control those impacts will ultimately lead to improved performance and a cleaner environment.

For further information on how to develop an Environmental Management System specific to your facility, the Environmental Science and Services Division has an Environmental Management System Guidance Manual available. The manual is designed in workbook format to take you step-by-step through the process of developing an EMS. Establishments can use it as a resource to learn more about the necessary elements of an EMS and its value. Contact the Environmental Assistance Center at 1-800-662-9278 to order a copy, or access the manual online at www.michigan.gov/deqC3 and click on "related links".























